

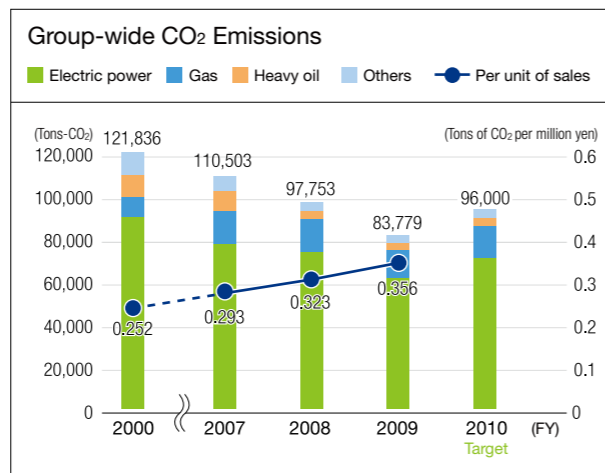
## Reducing Greenhouse Gasses

### Reducing Greenhouse Gas Emissions

In an effort to efficiently and consistently reduce CO<sub>2</sub> emissions, we have set up the Subcommittee on Energy Savings as a channel for representatives from individual Citizen Group premises to report on their respective activities and take on board initiatives that have proven effective at other sites.

Our goal for fiscal 2009 was to reduce Groupwide CO<sub>2</sub> emissions by 1% per unit of sales and by 1,500 tons overall compared to fiscal 2008. Although we managed to substantially reduce the total volume of emissions by approximately 14,000 tons due to deteriorating economic conditions, emissions per unit of sales increased by approximately 10% to 0.356.

Using sales as the basic unit denominator in this manner is not an effective indicator of the extent to which we have efficiently reduced environmental impact. As such, we intend to concentrate on reducing the total amount of emissions in the future.



For more detailed information, please refer to our website.  
[Citizen Holdings > CSR Activities > Citizen and the Environment > Reducing Greenhouse Gasses](#)

## Effective Utilization of Resources and Reduction of Waste

### Promoting Waste Reduction Activities

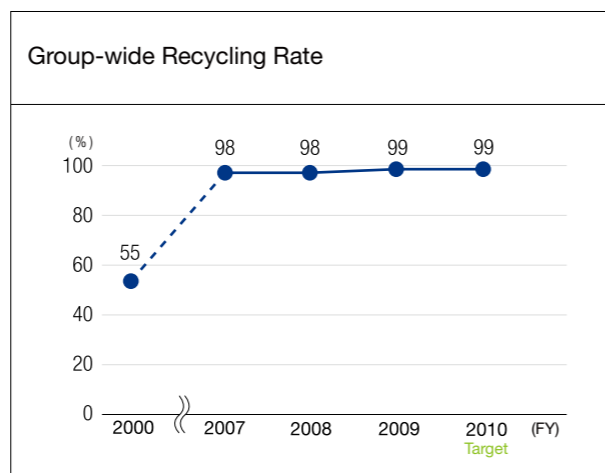
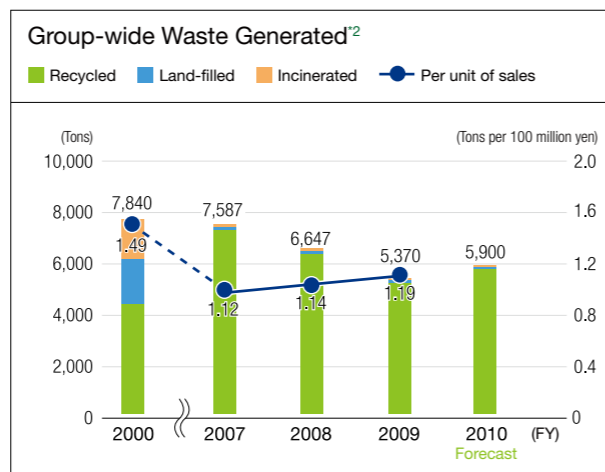
We implement initiatives aimed at eliminating garbage rather than disposing of it as waste in an effort to contribute to the creation of a recycling-based society. During fiscal 2009 we worked towards the twin goals of reducing the amount of waste per unit of sales by 1% compared to fiscal 2008 and achieving a 99% recycling rate.

As a result, we were able to achieve a Group-wide recycling rate of 99% and completely eliminate garbage at 16 domestic premises (recycling rate of 99% or higher). In terms of waste reduction, the volume of waste<sup>\*1</sup> fell by approximately 660 tons due to current economic conditions. Waste per unit of sales on the other hand rose by 4% to 1.19 tons. Since fiscal 2007, basic unit management has ceased to be an effective indicator of the extent to which we have efficiently reduced environmental impact. As reductions are also starting to grind to a halt, we have set ourselves the target of maintaining a recycling rate of 99% or higher (zero waste) on a Groupwide basis for fiscal 2010.

\*1 amount of waste = industrial waste + general waste

\*2 Waste generated = industrial waste + general waste + valuable resources

For more detailed information, please refer to our website.  
[Citizen Holdings > CSR Activities > Citizen and the Environment > Effective Utilization of Resources and Reduction of Waste](#)



## Reducing Hazardous Chemical Substances

### Reducing Usage of Hazardous Chemical Substances

Having started to work on reducing the use of substances such as chlorinated organic solvents and chlorofluorocarbon alternatives (HCFCs) in fiscal 2003, we managed to entirely eliminate all such substances in 2008. The table below summarizes PRTR substances reported by the Citizen Group as a whole during fiscal 2009.

We used four substances that are subject to reporting requirements and handled approximately 33 tons in total, a reduction of 8 tons compared to fiscal 2008. The total amount of substances discharged or transferred during fiscal 2009 came to 22 tons, representing a 92% reduction compared to levels in fiscal 2004 (258 tons).

Amount of PRTR substances released and transferred in fiscal 2009 (t)

Chemical substance	Volume handled	Volume released				Volume transferred	
		Released into atmosphere	Released into public waters	Released into soil at works	Disposed of by landfill at works	Transferred to sewage system	Transferred offsite
Xylene	13.8	2.6	0.0	0.0	0.0	0.0	4.7
Nickel compounds	9.4	0.0	0.0	0.0	0.0	0.0	8.2
Hydrogen fluoride and water soluble salts	8.2	0.0	0.5	0.0	0.0	0.0	6.1
Inorganic cyanide compounds	1.2	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>32.6</b>	<b>2.6</b>	<b>0.5</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>19.0</b>

For more detailed information, please refer to our website.  
[Citizen Holdings > CSR Activities > Citizen and the Environment > Reducing Hazardous Chemical Substances](#)

## Enhancing Products with Citizen Environmentally-Friendly Products

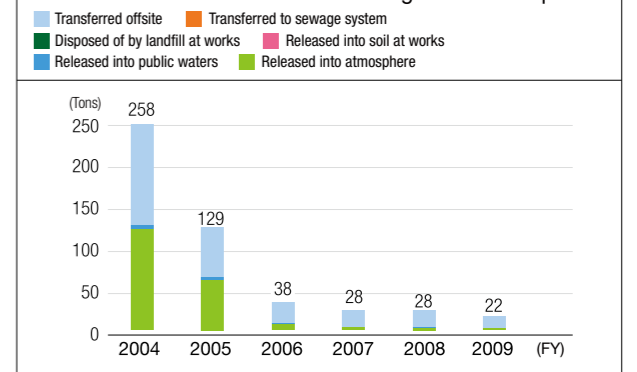
### Expanding Our Range of Environmentally-Friendly Products

We continue to promote environmentally-friendly product initiatives and carry out product assessments focusing on numerous different areas from the development stages onwards. Only products that meet all of our assessment criteria, including resource and energy efficiency, reuse and recycling, long-term usability, environmental conservation (hazardous chemical substance management), the provision of environmental information and packaging, are certified as environmentally-friendly products. During fiscal 2008 we set out assessment criteria and started to work on Citizen Super Environmentally-Friendly Products, which will undergo even more rigorous assessments. On other fronts, we are ready to launch specific initiatives in compliance with the European EuP Directive and intend to take action in the future now that full details of the relevant regulations have been made clear.

In terms of compliance with REACH regulation

For more detailed information, please refer to our website.  
[Citizen Holdings > CSR Activities > Citizen and the Environment > Enhancing the Lineup with Environmentally-Friendly Products](#)

Amount of PRTR Substances Discharged and Transported



### Launching COD Removal Facilities at Chinese Plant

The Chinese plant operated by Citizen Seimitsu subsidiary Walop Ltd. manufactures items such as watch components, HDD glass and liquid crystal components. This means that it has to treat wastewater from plating, grinding and cleaning processes amongst others. With wastewater standards becoming increasingly strict in China with every passing year, we were concerned that COD (chemical oxygen demand) emissions might not meet statutory requirements as a result of revisions to the law during fiscal 2008.

Given the limitations of our existing deposit removal facilities, we responded to revised legislation by expanding chemical treatment COD removal facilities to enable us to comply with the statutory requirement of 90ppm.

Of the 30 companies performing wastewater treatment operations in the area during fiscal 2009, we were chosen as one of the best three.



Chemical treatment COD removal facilities

meanwhile, we have introduced a dedicated management system and are managing chemical substances accordingly.

### Ratio of environmentally-friendly products

We continued to work towards the target of achieving a 100% ratio of environmentally-friendly products as a percentage of all new models during fiscal 2008. We have successfully increased the ratio since 2005, when we began initiatives in earnest, and achieved a ratio of almost 100% in fiscal 2009.

Ratio of Citizen Environmentally-Friendly Products among New Models

